UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,128	08/29/2001	Yoshikazu Takashima	275770US8	9308
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET			EXAMINER	
			JONES, HEATHER RAE	
ALEXANDRIA, VA 22314			ART UNIT	PAPER NUMBER
			2621	
			NOTIFICATION DATE	DELIVERY MODE
			12/24/2008	ELECTRONIC

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com oblonpat@oblon.com jgardner@oblon.com

	Application No.	Applicant(s)			
	09/943,128	TAKASHIMA ET AL.			
Office Action Summary	Examiner	Art Unit			
	HEATHER R. JONES	2621			
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet with th	ne correspondence address			
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory perionally reply or perionally reply within the set or extended period for reply will, by status Any reply received by the Office later than three months after the main earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICAT 1.136(a). In no event, however, may a reply but will apply and will expire SIX (6) MONTHS ute, cause the application to become ABAND	ION.  be timely filed  from the mailing date of this communication.  DNED (35 U.S.C. § 133).			
Status					
1) ☐ Responsive to communication(s) filed on <u>07</u> 2a) ☐ This action is <b>FINAL</b> . 2b) ☐ The 3) ☐ Since this application is in condition for allow closed in accordance with the practice under	nis action is non-final. vance except for formal matters,				
Disposition of Claims					
4) ☐ Claim(s) 1.2 and 7-15 is/are pending in the a 4a) Of the above claim(s) is/are withdr 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1.2 and 7-15 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and Application Papers	rawn from consideration.				
9) ☐ The specification is objected to by the Examin 10) ☑ The drawing(s) filed on 29 August 2001 is/are Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the I	e: a)⊠ accepted or b)⊡ object ne drawing(s) be held in abeyance. ection is required if the drawing(s) is	See 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Sumn Paper No(s)/Ma 5) Notice of Inform 6) Other:				

Art Unit: 2621

#### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 7, 2008 has been entered.

### Response to Arguments

2. Applicant's arguments filed November 7, 2008 have been fully considered but they are not persuasive.

The Applicant argues that neither Suzuki et al. nor Mercier disclose that the apparatus discloses a demultiplexing means for demultiplexing the coded bit stream accumulated in the accumulation means and a multiplexing means for multiplexing the coded bit stream for which the control data has been rewritten. The Examiner respectfully disagrees. Mercier discloses a transmitting apparatus for converting a coded bit stream into a trick play output and sending the coded bit stream to a transmission path, comprising: accumulating means for accumulating the coded bit stream including an intra-frame coded picture, a forward predictive-coded picture, and a bidirectionally predictive-coded picture; demultiplexing means for demultiplexing the coded bit stream accumulated in the

Art Unit: 2621

accumulation means; content processing means for processing the coded bit stream, wherein the processing includes trick play; multiplexing means for multiplexing the coded bit stream for which the control data has been rewritten; and output means for outputting a picture whose control data has been rewritten and the formed picture in accordance with the control of the output means (Fig. 14; col. 10, line 56 – col. 11, line 18). Therefore, Mercier has been added to the previous rejection of claim 1 and the rejection is maintained.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1, 2, and 7-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (U.S. Patent 5,699,474) in view of Mercier (U.S. Patent 6,865,747).

Regarding claim 1, Suzuki et al. discloses a transmitting apparatus for converting a coded bit stream into a trick play output and sending the coded bit stream to a transmission path, comprising: accumulating means for accumulating the coded bit stream including an intra-frame coded picture, a forward predictive-coded picture, and a bidirectionally predictive-coded picture (401); output control means for controlling an output of the coded bit stream in an output mode corresponding to a designated trick play operation (406); rewriting means for

Application/Control Number: 09/943,128

Art Unit: 2621

rewriting control data which specifies a displaying order of the pictures with respect to the coded bit stream (86) (col. 14, lines 15-20), and rewriting control data that specifies an accumulation amount of a virtual input buffer of a decoder in a picture header to an invalid value (col. 14, lines 45-50); picture forming means for forming a picture obtained by copying a predetermined picture (col. 12, lines 49-65); output means for outputting a picture whose control data has been rewritten and the formed picture in accordance with the control of the output means (col. 12, lines 49-65). However, Suzuki et al. fails to disclose that the apparatus comprises a demultiplexing means for demultiplexing the coded bit stream accumulated in the accumulation means and a multiplexing means for multiplexing the coded bit stream for which the control data has been rewritten.

Page 4

Referring to the Mercier reference, Mercier discloses a transmitting apparatus for converting a coded bit stream into a trick play output and sending the coded bit stream to a transmission path, comprising: accumulating means for accumulating the coded bit stream including an intra-frame coded picture, a forward predictive-coded picture, and a bidirectionally predictive-coded picture; demultiplexing means for demultiplexing the coded bit stream accumulated in the accumulation means; content processing means for processing the coded bit stream, wherein the processing includes trick play; multiplexing means for multiplexing the coded bit stream for which the control data has been rewritten; and output means for outputting a picture whose control data has been rewritten

Application/Control Number: 09/943,128

Art Unit: 2621

and the formed picture in accordance with the control of the output means (Fig. 14; col. 10, line 56 – col. 11, line 18)

Page 5

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included demultiplexing and multiplexing means as disclosed by Mercier in the apparatus disclosed by Suzuki et al. in order to properly process the coded bit stream to allow the coded bit stream to be subsequently outputted to an HDTV.

Regarding claim **2**, Suzuki et al. in view of Mercier discloses all the limitations as previously discussed with respect to claim 1, including that the predetermined picture is the intra-frame coded picture or the forward predictive-coded picture, the copied picture is outputted as a skip P picture having a structure such that macroblocks other than macroblocks at both ends of a slice is skipped (Suzuki et al.: col. 15, line 64 – col.16, line 9 – this is an inherent feature required by MPEG).

Regarding claim **7**, Suzuki et al. discloses a transmission system of image information, comprising: accumulating means for accumulating a coded bit stream including an intra-frame coded picture, a forward predictive-coded picture, and a bidirectionally predictive-coded picture (401); output control means for controlling an output of the coded bit stream in an output mode corresponding to a designated trick play operation (406); rewriting means for rewriting control data which specifies a displaying order of the pictures with respect to the coded bit stream (86) (col. 14, lines 15-20), and rewriting control data that specifies an

Art Unit: 2621

accumulation amount of a virtual input buffer of a decoder in a picture header to an invalid value (col. 14, lines 45-50); picture forming means for forming a picture obtained by copying a predetermined picture (col. 12, lines 49-65); output means for outputting a picture whose control data has been rewritten and the formed picture as trick play output data in accordance with the control of the output means (col. 12, lines 49-65); a digital interface connected to the output means (col. 10, lines 29-34); and an apparatus for recording or displaying the trick play output data received through the digital interface (604) (col. 10, lines 35-42). However, Suzuki et al. fails to disclose that the apparatus comprises a demultiplexing means for demultiplexing the coded bit stream accumulated in the accumulation means and a multiplexing means for multiplexing the coded bit stream for which the control data has been rewritten.

Referring to the Mercier reference, Mercier discloses a transmitting apparatus for converting a coded bit stream into a trick play output and sending the coded bit stream to a transmission path, comprising: accumulating means for accumulating the coded bit stream including an intra-frame coded picture, a forward predictive-coded picture, and a bidirectionally predictive-coded picture; demultiplexing means for demultiplexing the coded bit stream accumulated in the accumulation means; content processing means for processing the coded bit stream, wherein the processing includes trick play; multiplexing means for multiplexing the coded bit stream for which the control data has been rewritten; and output means for outputting a picture whose control data has been rewritten

Art Unit: 2621

and the formed picture in accordance with the control of the output means (Fig. 14; col. 10, line 56 – col. 11, line 18)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included demultiplexing and multiplexing means as disclosed by Mercier in the apparatus disclosed by Suzuki et al. in order to properly process the coded bit stream to allow the coded bit stream to be subsequently outputted to an HDTV.

Regarding claim 8, this is a method claim corresponding to the apparatus claim 1. Therefore, claim 8 is analyzed and rejected as previously discussed with respect to claim 1.

Regarding claims **9** and **10**, Suzuki et al. in view of Mercier discloses all the limitations as previously discussed with respect to claims 1 and 7 including that the picture formed by the image forming means represents an entire frame of the coded bit stream (Suzuki et al: Fig. 8).

Regarding claim **11**, this is a method claim corresponding to the apparatus claim 9. Therefore, claim 11 is analyzed and rejected as previously discussed with respect to claim 9.

Regarding claim **12**, Suzuki et al. discloses a transmitting apparatus for converting a coded bit stream into a trick play output and sending the coded bit stream to a transmission path, comprising: a memory configured to accumulate the coded bit stream including an intra-frame coded picture, a forward predictive-coded picture, and a bidirectionally predictive-coded picture (401); a controller

Art Unit: 2621

configured to control an output of the coded bit stream in an output mode corresponding to a designated trick play operation (406); a rewriting module configured to rewrite control data which specifies a displaying order of the pictures with respect to the coded bit stream (86) (col. 14, lines 15-20); a rewriting module configured to rewrite control data that specifies an accumulation amount of a virtual input buffer of a decoder in a picture header to an invalid value (col. 14, lines 45-50); picture forming module configured to form a picture obtained by copying a predetermined picture (col. 12, lines 49-65); and an output configured to output a picture whose control data has been rewritten and the formed picture in accordance with the control of the output means (col. 12, lines 49-65). However, Suzuki et al. fails to disclose that the apparatus comprises a demultiplexing means for demultiplexing the coded bit stream accumulated in the accumulation means and a multiplexing means for multiplexing the coded bit stream for which the control data has been rewritten.

Referring to the Mercier reference, Mercier discloses a transmitting apparatus for converting a coded bit stream into a trick play output and sending the coded bit stream to a transmission path, comprising: accumulating means for accumulating the coded bit stream including an intra-frame coded picture, a forward predictive-coded picture, and a bidirectionally predictive-coded picture; demultiplexing means for demultiplexing the coded bit stream accumulated in the accumulation means; content processing means for processing the coded bit stream, wherein the processing includes trick play; multiplexing means for

Application/Control Number: 09/943,128

Art Unit: 2621

multiplexing the coded bit stream for which the control data has been rewritten; and output means for outputting a picture whose control data has been rewritten and the formed picture in accordance with the control of the output means (Fig. 14; col. 10, line 56 – col. 11, line 18)

Page 9

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included demultiplexing and multiplexing means as disclosed by Mercier in the apparatus disclosed by Suzuki et al. in order to properly process the coded bit stream to allow the coded bit stream to be subsequently outputted to an HDTV.

Regarding claims **13-15**, Suzuki et al. in view of Mercier discloses all the limitations as previously discussed with respect to claims 1, 7, and 8, including that the coded bit stream is output by a slow operation by removing the bidirectionally predictive-coded picture and repeating output processes such that after the intra-frame coded picture and the forward predictive-coded picture which repetitively appear at intervals (m), the copied pictures of the number of larger than the (m) are outputted (Mercier: col. 9, line 64 – col. 10, line 54).

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HEATHER R. JONES whose telephone number is (571)272-7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

Art Unit: 2621

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Heather R Jones Examiner Art Unit 2621

HRJ December 17, 2008

/Thai Tran/ Supervisory Patent Examiner, Art Unit 2621